

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
20 January 2005 (20.01.2005)

PCT

(10) International Publication Number
WO 2005/005532 A1

- (51) International Patent Classification⁷: **C08L 23/00**, (74) Agents: LUZZATTO, Kfir et al.; P.O. Box 5352, 84152 Beer Sheva (IL).
C08J 3/24, C08F 255/02
- (21) International Application Number: PCT/IL2004/000615
- (22) International Filing Date: 8 July 2004 (08.07.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
156870 10 July 2003 (10.07.2003) IL
- (71) Applicant (for all designated States except US): **CARMEL OLEFINS LTD.** [IL/IL]; P.O. Box 1468, 31014 Haifa (IL).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **RAKHMAN**, Moshe [IL/IL]; 1A Armonim Street, 36810 Nesher (IL). **FEIGLIN**, Tehila [IL/IL]; 11/35 Mendel Singer Street, 34984 Haifa (IL). **GISHBOLINER**, Michael [IL/IL]; 38/5 Hativat Yiftakh Street, 20100 Karmiel (IL). **SHUSTER**, Michael [IL/IL]; 4/12 HaShikma Street, 36812 Nesher (IL).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:**
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: PROCESS FOR MAKING THERMOPLASTIC VULCANIZATES

(57) Abstract: Abstract The invention provides a process for dynamic vulcanization comprising grafting organic silane on disperse phase component, thereby introducing chains into the component which are cross-linkable in the presence of cross-linking agents when the component is molten. The invention further provides thermoplastic vulcanizates having superior properties, including high flexibility and impact resistance, low hygroscopicity, non-toxicity, and excellent processability.

WO 2005/005532 A1